

to 0.0001 square mm and an angle of inclination of a cross section thereof is within a range of 7 to 43 degrees.

2. (amended) A liquid crystal display apparatus comprising:

a light conductor plate;

a light source arranged on a side surface of said light conductor plate so as to light a liquid crystal cell from a side of a back surface; and

said light conductor plate having an incident surface for a light from the light source, a light emitting surface for emitting the input light to the liquid crystal cell, and a plurality of dots constituting by small projecting portions or small recess portions for changing a moving direction of the light from the incident surface toward a direction of the light emitting surface provided on a surface opposite to the light emitting surface, each of said dots having an area within a range of 0.01 to 0.0001 square mm and an angle of inclination of a cross section thereof is within a range of 7 to 43 degrees.

3. (amended) A liquid crystal display apparatus comprising:

a light conductor plate;

a light source arranged on a side surface of said light conductor plate so as to light a liquid crystal cell from a side of a back surface; and

said light conductor plate having an incident surface for a light from the light source, a light emitting surface for emitting the input light to the liquid crystal cell, and a plurality of dots constituting by small projecting portions or small recess portions for changing a moving direction of the light from the incident surface toward a direction of the light emitting surface provided on the light emitting surface, each of said dots having an area within a range of 0.01 to 0.0001 square mm and an angle of inclination of a cross section thereof is within a range of 7 to 43 degrees.

Please cancel claims 4 and 5 without prejudice or disclaimer of the subject matter thereof.

Please amend claims 6-12 as follows:

6. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein a shape of each of said dots constituting by the small projecting portions or the small recess portions is a substantially rectangular shape, and a length of a short line thereof is equal to or less than 200 μm .

7. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein a shape of each of said dots constituting by the small projecting portions or the small recess portions is a substantially rectangular shape, and a length of a short line thereof is between 10 and 100 μm .

8. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein a shape of each of said dots constituting by the small projecting portions or the small recess portions is a substantially rectangular shape, and a ratio between a short line and a long line thereof is equal to or less than 80.

9. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein a shape of each of said dots constituting by the small projecting portions or the small recess portions is a substantially rectangular shape, and a ratio between a short line and a long line thereof is equal to or less than 20.

10. (amended) A liquid crystal display apparatus as claimed claim 1, wherein a height or a depth of each of said dots constituting by the small projecting portions or the small recess portions is within a range between 2 and 100 μm .

11. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein a height or a depth of each of said dots constituting by the small projecting portions or the small recess portions is within a range between 5 and 40 μm .

12. (amended) A liquid crystal display apparatus as claimed in claim 6, wherein a shape of each of said dots constituting by the small projecting portions or the small recess portions is a substantially rectangular shape, and a long line of the rectangular shape is arranged substantially in parallel to the light emitting surface of the light source.

Please cancel claims 13 and 14 without prejudice or disclaimer of the subject matter thereof.

Please amend claims 15-27 as follows:

15. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein a number per a unit area of the small projecting portions or the small recess portions in said light conductor plate is increased from a side of the light source toward an opposite side.

16. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein a reflecting film is formed on a surface forming the dots constituting by the small projecting portions or the small recess portions in said light conductor plate.

17. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein the small projecting portions or the small recess portions in said light conductor plate are arranged at random.

18. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein an angle of incline in cross section of the dots constituting by the small projecting portions or the small recess portions in said light conductor plate is changed from a portion near the light source toward a portion apart from the light source, and an angle thereof is substantially smaller at the portion near the light source.

19. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein an angle of incline in cross section of the dots constituting by the small projecting portions or the small recess portions in said light conductor plate is changed from a portion near the light source toward a portion apart from the light source, an angle thereof is substantially smaller at the portion near the light source, and when sectioning the dot forming surface of the light conductor plate by a regular square of 1 to 4 square cm, an average of an angle of incline of a cross section within a regular square closest to the light source is 0.5 to 15 degrees different from an average of an angle of incline of a cross section within a regular square most apart from the light source.

20. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein when sectioning the dot forming surface of said light conductor plate by a regular square of 1 to 4 square cm, an angle of incline of a cross section of the dots constituted by the small projecting portions or the small recess portions existing

within said regular square is changed at every dots or every dot portions within one dot.

21. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein when sectioning the dot forming surface of said light conductor plate by a regular square of 1 to 4 square cm, an angle of incline of a cross section of the dots constituted by the small projecting portions or the small recess portions existing within said regular square is changed at every dots or every dot portions within one dot, within a range between averages ± 2 and 15 degrees within said regular square.

22. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein a width of the dots constituted by the small projecting portions or the small recess portions in said light conductor plate, that is, a length of the dots in a direction perpendicular to the light source is changed from a portion near the light source toward a portion apart from the light source, and the width is substantially great in the portion near the light source.

23. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein an average distance between the dots constituted by the small projecting portions or the small recess portions in said light conductor plate, that is, a square root of a result obtained by a formula unit distance \pm dot density is changed from a portion near the light source toward a portion apart from the light source, and the distance is substantially great in the portion near the light source.

24. (amended) A liquid crystal display apparatus as claimed in claim 1, wherein a calculated average surface roughness Ra of portions other than a dot